

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1-21 (canceled)

22.(new) Device for sanding a wooden barrel, consisting of a robot comprising:

- means for loading said barrel,
- means for gripping and rotating said barrel around the axis thereof,
- means for removing and replacing the two bilge hoops of said barrel,
- means for sanding said barrel, and
- means for removing said barrel.

23.(new) Device according to Claim 22, wherein said gripping and rotating means comprise two mobile headstocks moving symmetrically and each including extendable clamping jaws.

24.(new) Device according to Claim 22, wherein said hoop removing and replacing means comprise a plurality of arms mounted to be mobile between an open position in which they are moved away from said barrel and a closed position in which they are able to grip one of said bilge hoops and to slide along the axis of said barrel.

25.(new) Device according to Claim 24, wherein said arms are mounted on a carriage adapted to slide between a first position in which said arms face one of said bilge hoops and a second position in which said arms face the other of said bilge

hoops.

26.(new) Device according to Claim 25, wherein said arms comprise clamping shoes conformed to be applied to either of said bilge hoops interchangeably.

27.(new) Device according to Claim 24, comprising means for preventing said arms from gripping each of said bilge hoops too tightly.

28.(new) Device according to Claim 24, comprising four arms.

29.(new) Device according to Claim 22, wherein said sanding means comprise a sanding head including a belt sander.

30.(new) Device according to Claim 29, wherein said sanding head is mounted so that it is able to slide along the axis of said barrel.

31.(new) Device according to Claim 30, comprising means for varying the distance of said sanding head from the axis of said barrel.

32.(new) Device according to Claim 31, wherein said distance varying means comprise a deformable parallelogram.

33.(new) Device according to Claim 29, comprising means for varying the inclination of said sanding head to the axis of said barrel.

34.(new) Device according to Claim 29, comprising means for adjusting the pressure exerted on said barrel by said sanding head.

35.(new) Device according to Claim 22, comprising a safety enclosure with an entry airlock and an exit airlock for said barrel.

36.(new) Device according to Claim 35, comprising means for sequencing the passage of said barrel into said entry airlock.

37.(new) Device according to Claim 22, comprising means for identifying the position of the bunghole of said barrel.

38.(new) Device according to Claim 22, comprising means for immobilizing and lifting said barrel.

39.(new) Method applied to a device according to Claim 22, comprising the steps of:

- a) placing said barrel between said gripping and rotating means,
- b) gripping said barrel with said gripping and rotating means,
- c) removing one of said bilge hoops on one half of said barrel with said hoop removing and replacing means,
- d) rotating said barrel with said gripping and rotating means,
- e) sanding said half barrel with said sanding means,
- f) stopping the rotation of said barrel,
- g) replacing said bilge hoop with said hoop removing and replacing means,
- h) repeating steps c) to g) for the other bilge hoop and the other half of said barrel, and
- i) releasing said barrel from said gripping and rotating means.

40.(new) Method according to Claim 39 applied, wherein, for executing said step e), a sanding head is moved in the direction of the axis of said barrel.

41.(new) Method according to Claim 39, wherein, between said steps b) and c), the position of a bunghole of the barrel is identified in order to position said barrel so that said hoop removing and replacing means do not interfere with riveted areas of said bilge hoops.

42.(new) Method according to Claim 22, wherein, to execute said step c), said barrel is rotated so that it occupies a plurality of successive positions and, in each of said positions, removal forces are exerted on said bilge hoop with said hoop removing and replacing means.